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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jerome Cros

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EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

MAIL DATE

DELIVERY MODE

07/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,357	Applicant(s) CROS ET AL.	
	Examiner Tran N. Nguyen	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. **The listing of references in the specification is not a proper information disclosure statement.** 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. **The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.** No new matter should be entered.

3. **The drawings are objected to under 37 CFR 1.83(a) because they fail to show clear details of the instant invention's features as described in the specification.** Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Particularly, Figures 1-6B of the drawings are so blurred that claimed features cannot be clearly identified as described in the specification, and Figures 7-10 are so simplified that they appear to be schematic sketching instead of detailed illustrations of the claimed features.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

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- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an

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abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the **first paragraph of 35 U.S.C. 112**:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 1-14** are rejected under 35 U.S.C. **112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recitation "*A moving or stationary armature of a polyphase electrical machine comprising a plurality of identical magnetic circuit components, the components being distributed uniformly in a direction of motion and separated, by a magnetic air gap in a plane perpendicular to an air-gap surface between a stator and a rotor, the components being used for magnetic coupling to another machine part having poles alternately magnetized North-South in the direction of motion, with the other machine part being separated from the components by an air gap to allow for motion, where a circuit of each component comprises: a plurality of claws, the claws arranged in a plurality of rows, wherein a base of each claw in a same row is*

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connected to a common yoke; and one or several coils wound on a base of corresponding claws, wherein one or several coils have an axis perpendicular to the air-gap surface." contains new subject matters. Particularly the phrase "***a moving or stationary armature of a polyphase electrical machine comprising a plurality of identical magnetic circuit components***, the components being distributed uniformly in a direction of motion and separated, by a magnetic air gap in a plane perpendicular to an air-gap surface between a stator and a rotor, ***the components being used for magnetic coupling to another machine part having poles alternately magnetized North-South in the direction of motion***" seems to recite a polyphase electrical machine's an armature having a plurality of identical magnetic circuit components that being used for magnetic coupling to another machine part, instead of being used as magnetic coupling to another part of said polyphase electric machine.

According to the specification, the plurality of identical magnetic circuit components defined an armature, i.e., an armature comprises plural identical magnetic circuit components, wherein the armature is being used as a stator or a magnetic coupling part in the polyphase electrical machine. The specification does not provide any support that the armature's *components being used for magnetic coupling to another machine part*. The term "another machine part" seems to refer to a part of a ***different machine*** instead of said polyphase machine that recited in claim 1 line 1. Therefore, claim 1 appears to contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 2-14 are included herein this rejection due to their dependencies from claim 1.

7. **Claims 1-14** are rejected under 35 U.S.C. 112, **second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because of the following:

(a) **In claim 1**, the phrase "the *components being distributed uniformly in a direction of motion*" is confusing because it is unclear what subject matter being in motion so that the components being distributed in that subject matter's direction of motion. Is the so-called direction of motion being a rotary direction of the recited rotor?

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(b) In claim 1, the phrase “*the components being ...separated, by a magnetic air gap in a plane perpendicular to an air-gap surface between a stator and a rotor*” does not clearly recite to what subject matter do the stator and rotor belong, are they parts of the polyphase electrical machine, as recited in claim 1 line 1, or are they parts of the so-called "another machine part", as recited in claim 1 line 5?

Assuming that the rotor and the stator were parts of the polyphase electric machine, while the armature's structural relationship with respect to the stator and the rotor is established, i.e., the armature's components being separated by a magnetic air gap in a plane perpendicular to an air-gap surface between a stator and a rotor, it is unclear what is the armature's magnetic relationship and functional/operational relationship with respect to the stator and rotor of the polyphase machine? Does the polyphase machine having three major elements: (1) the armature, (2) the stator, and (3) the rotor OR the armature functions as a stator.

(c) In claim 1, the term "*a magnetic air gap*" is confusing. An “air gap” is understood as a nonmagnetic gap defined by an empty space, i.e., air, which is nonmagnetic or nonmagnetically conducting. Thus, the term “a magnetic air gap” seems to contradict itself between being magnetically conducting if understood as “a magnetic gap” OR being nonmagnetically conducting if understood as “an air gap”. Hence, the term “a magnetic air gap” is indefinite.

(d) In claim 1, the phrase “*components being used for magnetic coupling to another machine part*” is indefinite because the term “another machine part” seems to refer to a part of a different machine instead of said polyphase machine that recited in claim 1 line 1. Assuming that the term “another machine part” were a part of the polyphase machine, it is unclear what are the structural and functional relationship of so-called "another machine part" with respect to the polyphase machine's stator and rotor?

Claims 2-14 are included herein this rejection due to their dependencies from claim 1.

According to MPEP 2173.06 that states:

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“...where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim, it would not be proper to reject such a claim on the basis of prior art. As stated in In re Steele , 305 F.2d 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims.”

In this instant case:

(a) given the great deal of confusion and uncertainty as to the proper interpretation of the limitations of claims, as explained in the 35 UCS 112 - 2nd paragraph,

(b) given the lack of description in the specification for the claimed language resulting a possibility of new subject matter being introduced in the claimed language, as explained in the 35 UCS 112 - 1st paragraph,

(c) given the great deal of blurred condition of the drawings that the drawings do not provide clear illustrations of the claimed features for assisting a proper interpretation of the limitations of the claims, as explained in the drawing objections,

it would not be proper to reject claims 1-14 on the basis of prior art.

Therefore, no rejection based on prior art is given at this point of prosecution (MPEP 2173.06).

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen via **email** at Tran.Nguyen@USPTO.gov

The applicant is advised that ALL communications via email are UNOFFICIAL. Emailing is only for establishing initial contact with the Examiner.

If the Applicant needs to request an Official Interview, please email to inform the Examiner and an Official Interview will be scheduled accordingly.

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If attempts to reach the examiner by email and/or telephone are unsuccessful, the Examiner can be reached via email. If attempts to reach the examiner by telephone or email are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on 571-272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. (Note: **Use this Central Fax number 571-273-8300 for all official response.**)

Do **not** use the Examiner's RightFax number without informing the Examiner first because, according to the USPTO policy, any document being sent via RightFax is treated as unofficial response and will not be officially dated until it is routed to the Central Fax.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tran Nguyen/

Primary Examiner, Art Unit 2834